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ABSTRACT

A pre-fiber gel material is described herein that includes: a) at least one amide-based and/or polyamide-based composition; and b) at least one lactam gelling agent, wherein the gel composition has sufficient viscosity and sufficient cohesiveness upon the mixing of the at least one amide-based or polyamide-based polymer and the at least one lactam gelling agent that the composition can be spun into a fiber. In addition, methods are provided herein that teach that the production of a pre-fiber gel composition, including: a) providing at least one amide-based compound; b) providing at least one lactam gelling agent; and c) mixing the at least one amide-based polymer and the at least one lactam gelling agent such that there is sufficient viscosity and sufficient cohesiveness in the composition so that it can be spun into a fiber.